

## THE TREATMENT OF CHRONIC PERIMETRITIS, BY PUNCTURE AND IODINE INJECTIONS.

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IN common with all who have seen much of gynecological practice, the writer has found the treatment of periuterrine cellulitis a source of constant disappointment and annoyance.

Three years ago, when in charge of the venereal wards of the Charity Hospital on Blackwell's Island, he made, as carefully as possible, a number of experiments to ascertain the value of alterative and absorbent injections into the pelvic deposit; and, as the result of these has never been published, he proposes to place it on record now. The memoranda are taken from notes made on the spot by the house surgeons in charge of the cases treated.

In all, *eleven* cases were treated with injections of iodine into the masses of pelvic deposit, — *eight* with iodine alone, *three* with a mixture of iodine and biniodide of mercury, the latter ingredient being added on account of well-marked syphilitic complications. The iodine employed was in the form of Lugol's solution, which was selected because it was believed to be less irritating than the alcoholic solutions.

For brevity's sake, and to present the results obtained as concisely as possible, the salient points only of these cases will be given, all unnecessary details being omitted.

CASE I. — S. B., aged twenty-eight, single, multipara, admitted September 4, 1878. She had well-marked constitutional syphilis, such as gummata of scalp and lip, tertiary ulceration of the fourchette and perineum, following an initial lesion three years before.

Incidental chronic pelvic cellulitis existed, as a result of suppression of menstruation from cold. There was a large and dense deposit on the left of the uterus. After a month's ineffectual treatment of the cellulitis by the usual methods, the combined injection of iodine and mercury was attempted; six minims of Lugol's solution and  $\frac{1}{20}$  grain hydrarg. biniodid. in solution were cautiously injected into the boggy mass through the vaginal roof, with the finest attainable needle of a hypodermic syringe. The patient was put to bed, and a hot vaginal douche given night and morning. No pain or rise of temperature occurred. In two days the injection was repeated, with no result.

Six subsequent injections (eight in all) were given at intervals of two days, without diminution of the deposit, when rapidly increasing tenderness and the patient's unwillingness to remain in bed brought the treatment to an end.

CASE II. — A. W., aged thirty-two, married, multipara, admitted May 18, 1878, for specific vaginitis. No syphilis or other constitutional taint was ascertainable. Well-marked and extensive cellulitis existed, consequent upon endometritis and salpingitis, which followed the gonorrhea; slight tenderness in right iliac fossa, — none on left side; the uterus was fixed, and the entire small pelvis filled with a deposit of lymph. The perimetritis had been detected two months previously, but no treatment except hot vaginal douches had been employed.

In this case injections of iodine alone were employed. Five minims of Lugol's solution were first injected into the mass in Douglas' pouch, and the same amount the following day, with no result. After two days' interval, ten minims were used in like manner, — no effect for six hours; then a slight temporary rise of temperature and increased tenderness. Two days' later we employed two injections, — ten minims on the left of uterus, six minims on the right. In two hours this was followed by a chill and high fever, increased pelvic tenderness, and pain, terminating in eight days in a pelvic abscess behind the uterus, which was twice aspirated, but subsequently discharged more fully per rectum. The patient was confined to bed one month, with final complete recovery.

CASE III. — S. R., aged forty-three, single, admitted June 6 for chronic perimetritis, which had relapsed several times; no decided cachexia, but very anemic, and probably strumous. The deposit was confined to Douglas' pouch, which was full and bul-

ging into the vagina. The anterior cul-de-sac was free, the uterus anteverted, the bladder sensitive, but without cystitis. There had been no previous treatment for the present attack, which had lasted six weeks, as far as the patient could judge.

After two days' use of the vaginal douche, ten minims of Lugol's solution were injected, as before, into the mass behind the uterus, with no ill effect; in two days, twelve minims were injected; the following day, ten minims. These injections were omitted for four days on account of slight pain and rectal tenesmus. After this, the iodine was resumed, with the addition of three minims of a one per cent. solution of carbolic acid. This mixture was employed every second day until eleven injections, in all, had been given, when it was found that the deposit, previously as large as an orange, had shrunk to the size of a walnut.

For the last ten days the patient was allowed to leave her bed, but was always kept in the recumbent position for an hour after the injection was used, and the hot douche was regularly given twice daily. The result was complete disappearance of the perimetritis in twenty-seven days, with mobility of the uterus and relief of the vesical pain.

CASE IV. — J. S., aged twenty-six, single, admitted August 15, 1878, with secondary syphilis from initial lesion one year previous; alopecia, pharyngo-laryngitis, mucous patches on the tongue, lips, and vulva, and well-marked lichenous eruption in the stage of decline. Extensive perimetritis, following instrumental abortion in the fourth month of pregnancy. There was trifling uterine catarrh, but the uterine symptoms were extremely slight considering the amount of general pelvic inflammation and its origin. The patient was kept in bed four days, with three hot vaginal douches daily. No change took place in the density of the deposit, but there was less vaginal engorgement, and less tenderness on pressure.

On September 6 I injected eight minims of Lugol's solution, with no effect.

On September 8 I injected ten minims, which was followed by slight pain and thermometric elevation, but no chill.

On September 11 I injected ten minims of the solution, with gr.  $\frac{1}{20}$  hydrarg. biniodid. in solution, with no result.

On September 13, 15, 16, 18, 20, I repeated the injection last mentioned, with slight but progressive diminution of the pelvic deposit until September 20, when the last injection was followed

by a rigor, high fever, and intense abdominal pain. Hypodermic injections of morphia controlled the latter, but the threatening of peritonitis was so decided that the treatment was abandoned. No cause was ascertained for the ill effect of the last injection, as the patient was kept in bed, and her general hygiene rendered as perfect as possible. The pelvic deposit became even more extensive, and no benefit was obtained.

CASE V. — J. N., aged thirty-three, multipara, was admitted July 27, 1878. There was generalized syphilis of eight or ten years' standing; she had had all the well-marked secondary symptoms, and now has syphilitic ecthyma, tertiary ulceration of the left labium, periostitis of the tibia and sternum. There had been recurrent attacks of periuterine cellulitis, with a large deposit in the left iliac fossa; the uterus was fixed and retroverted; there was no disease of the bladder. A repetition of the treatment detailed in the last case, with the addition of general antisymphilic treatment internally, namely, potass. iodid., gradually pushed to full point of toleration, and  $\frac{1}{4}$  grain hyd. prot-iodid., with opium, three times daily until tenderness of gums was obtained. The injections into the pelvic deposit were made every second day without intermission or drawback, and in three weeks the uterus was freely movable, and the pelvis quite clear; but, as hot vaginal injections were constantly used, the patient kept in bed, and internal treatment of an alterative and absorbent character steadily given, it is impossible to say how much of the result is due to the injections.

CASE VI. — R. S., aged thirty, multipara, was admitted September 26, 1878, and transferred from the uterine service for treatment at my request. She has never had syphilis, but is of bad habits, intemperate and addicted to opium; is now rather feeble and anemic. She had two attacks of rheumatism, and one of severe malarial fever, during which she miscarried at third month of pregnancy, four years ago. She has never been well since that time.

She has now complex pelvic disease, a retroflexed uterus which is enlarged, tender, and immovable, laceration of both the cervix and perineum, and an extensive exudation filling the whole small pelvis, fixing the uterus, and compressing both rectum and bladder. When admitted, a sound was incautiously passed to the uterine fundus to ascertain its depth and exact position, which aggravated the perimetritis; and for two weeks no treatment was

adopted except rest and the hot vaginal douches. On October 10, as very little tenderness remained, ten minims of Lugol's solution were injected into the pelvic mass — in two hours this was followed by a chill and some fever, but no aggravation of pain; there was no repetition of the injection for four days. On October 14 I injected eight minims of Lugol's solution on the opposite side of the uterus — no ill effect. On October 16, 18, 21, I repeated the injections, increasing slightly the amount up to fifteen minims; this was followed by another chill, fever, and pelvic pain lasting for three days, after which the rigors returned with much rectal and vesical tenesmus; in eight days (October 29) it was evident that a pelvic abscess existed, and an attempt was made to aspirate it without success. On October 31 it was obviously pointing in the posterior cul-de-sac, and was then easily aspirated.

It refilled, opened spontaneously through the vagina, and a drainage tube was kept in the aperture. In spite of the greatest care in her treatment, this patient nearly died of septicemic exhaustion, and was three months in her bed.

CASES VII., VIII., and IX. cannot be given in detail, as many of the memoranda of their progress are lost. Enough remain, however, to show that in the first a temporary benefit was obtained which was followed by a relapse; while in the other two no advantage whatever was gained.

CASE X. — M. B., aged twenty-nine, married, multipara, was admitted October 10, 1878, with a pelvic abscess of long standing. No syphilis, or other constitutional disease existed, and the antecedent history was good until the present illness, which began sixteen months before her admission. After confinement at full term the patient found herself less strong and well than usual; her necessities compelled her to work, and in two weeks she was taken ill with "inflammation of the womb" from which she has suffered ever since. For six months she has been unable to walk, or to stand long, and has had a constant purulent discharge. Examination showed a large pelvic abscess to the right of the uterus and in Douglas' pouch. This had two vaginal openings, both patulous and ragged.

The uterus was fixed and anteverted; the left of the pelvis was filled with a dense deposit which was indistinctly boggy on pressure and tender. The patient was emaciated and anemic but her appetite was fairly good and her bowels regular. No venereal



disease existed as stated, and the patient came under my care only through the error of the distributing surgeon, who mistook the purulent discharge from the pelvic abscess for a gonorrhea. The abscess was carefully washed out for three days with carbolized water ; and, as the drainage was good, I decided to use the iodine injections.

On October 14 I injected the abscess with Lugol's solution reduced fifty per cent. with carbolized water, and at the same time injected ten minims of Lugol's solution into the mass on the left of the uterus with no ill effect ; on October 15 I washed out the abscess with hot carbolized water only ; on October 16 I repeated the injection used on the 14th ; on the 17th I repeated the iodine injection into the abscess, increasing the strength to eighty per cent. of Lugol's solution ; on October 18th I repeated injections as on the 16th ; on the 19th I washed out the abscess, which seemed much better and discharged less. On October 20 I repeated both injections.

This treatment was continued until November 16, gradually increasing the strength of the injection thrown into the abscess until pure Lugol's solution was used (3i at a time), when the abscess had entirely closed, and only a small nodule remained at the base of the large indurated mass which had filled the left iliac fossa. Each time a hot vaginal douche was used before and after the iodine injection, but no other local treatment was employed. The result was a complete cure in six weeks.

CASE XI. — S. F., aged thirty-seven, married, sterile, was admitted October 23, 1878. For years this patient had suffered from a submucous fibroid in the anterior wall of the uterus, which had anteverted it and caused frequent attacks of metrorrhagia.

During one of these she was compelled to change her rooms from one tenement house to another, and attributed her present illness to the effort and exposure then incurred.

On admission the uterus was anteverted, enlarged, and tender, the left ovary prolapsed, and on the right side a large fibrinous deposit was distinctly felt through the abdominal wall, in the right iliac fossa, and bulging through the vaginal roof, which was tense but somewhat boggy. This extended slightly toward the posterior cul-de-sac ; but the left side was quite clear, so that the prolapsed ovary and its relations were easily traced. Uterine catarrh and constant dragging pelvic pain also existed.

In spite of the large amount of blood lost, the patient retained

a good color, and was well nourished ; but loss of rest, dysuria, and the pelvic discomfort had broken down her nervous system.

Frequent uterine treatment at the city dispensaries had given no relief, and she was anxious to submit to anything that promised better results.

After the usual preparation by hot douches and rest in bed the iodine injections were begun, as it was evidently necessary to relieve the perimetritis before either uterus or ovary could be kept in place.

On October 30 I injected twelve minims of Lugol's solution through the vaginal roof into the mass in the right iliac fossa with no ill effect ; the vaginal douche was used for two days. On November 1 I repeated the injection as before, which caused slight pain and aching, but no rigor or elevation of temperature.

On November 3 the patient menstruated, a week before her time ; the flow was excessive, but was diminished by ergot and gallic acid, and lasted eight days with unusual pain. On November 14 I again injected ten minims of Lugol's solution into the pelvic mass, which was now softer and a little smaller ; no chill or fever followed, but "throbbing" pain for four hours after the injection. Hot douches for two days, and an abdominal poultice was applied as the throbbing returned spontaneously the day after the injection. Treatment was suspended for six days. On November 21 I injected fifteen minims of Lugol's solution at three P. M., — followed by rather more pain than usual, — and at four a violent chill of a half hour's duration occurred. Intense abdominal tenderness followed the chill, with a temperature of 104°, and a pulse of 120. The hot douche and poultice were resumed and morphia and quinia used freely. In spite of all precautions, a pelvic peritonitis followed which debarred all treatment but palliatives for a month. The perimetric deposit increased, filling Douglas' pouch and the left iliac fossa ; and for a week some alarming symptoms of septicemia ensued.

The patient slowly reacted to the condition in which she entered the hospital, when the routine treatment for cellulitis was begun, and the injections abandoned.

The result was no benefit from the iodine, with serious risk of death from septicemic peritonitis.

Of these eleven cases, therefore, injection of iodine, etc., into the pelvic deposit seemed to cure two much more

quickly and thoroughly than the ordinary method of treatment ; three of the eleven were benefited, but certainly in no greater degree than is usually attained by the common method ; while six cases, or more than fifty per cent., were injured rather than benefited.

So discouraging was this experience that the method was abandoned for the time ; and the writer is not aware that it has since then been employed by any of his former colleagues at the Charity Hospital. In the Woman's Hospital of New York he has resorted to it in a modified form in two cases only, both of pelvic abscess, with densely indurated deposits around the abscess-wall ; in these it acted well, softening the deposit and apparently hastening the process of absorption, but the iodic solution was greatly diluted and was used much more cautiously than in the cases detailed above.

In conclusion, while it must be acknowledged that iodine injections cannot be unreservedly commended in the treatment of chronic perimetritis, their cautious use in a limited class of cases is of unquestionable value ; and their utility in the management of open pelvic abscess will be appreciated by all who employ them.